

RESPONSE

1. In the Specification

Applicants have submitted herewith a new abstract of the disclosure which complies with U.S. PTO rules. Withdrawal of the objection is respectfully requested.

Applicants have replaced the original title of the invention with a new title that is clearly indicative of the invention to which the claims are directed. Withdrawal of the objection is respectfully requested.

2. Rejection of Claims 1-9 under 35 U.S.C. 112, second paragraph

Applicants have canceled original claims 1-9 and replaced them with claims 10-17. Claims 10-17 recite the same subject matter as original claims 1-9 in clearer terms and in conformance with 35 U.S.C. 112, second paragraph. Applicants submit that the subject matter of original claims 1-9 now embodied in claims 10-17 has not been limited in scope and that the new claims merely make explicit that which was implicit in the claims as originally filed. Withdrawal of the rejection is respectfully requested.

3. Rejection of claims 1 and 3 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,723,072 (Naruse)

Claims 1 and 3 stand rejected as being anticipated by Naruse. Claims 1 and 3 have been rewritten as new claims 10 and 12, respectively. Applicants respectfully traverse this rejection. For the reasons discussed below, Applicants submit that Naruse does not disclose or suggest the basic claimed apparatus recited in claim 10. Claim 12, which depends directly from claim 10, is also patentable based on its dependency from claim 10 and the particular arrangement of the sensors.

a. Invention Distinguished

Claim 10 generally recites an apparatus for determining the fitness of a bank note by sensing the bank note transported along a transport path by a transport device. The apparatus includes a plurality of identical sensor and illumination units positioned along each side of the transport path wherein the sensor and illumination units are focused at a single predetermined section of the transport path.

b. Reference Distinguished

Naruse discloses an apparatus for discriminating sheets or bank notes. In turning to FIG. 8, as used by the Examiner in the Office Action, Naruse discloses sensor and illumination units (100, 102, 110, 118) positioned on both sides of a transport path for a bank note. It should be noted that although the sensor and illumination units appear to be identical in Naruse, the sensor and illumination units are not positioned to be focused at a single predetermined section of the transport path as in the present invention.

In observing FIG. 8, Applicants submit that Naruse cannot be construed to teach sensor and illumination units that are positioned to be focused at a single predetermined section of the transport path. This is supported by the written specification of Naruse which states the light source 100 is located in front of light source 102 (Col. 7, lines 41-43). Taken in view of FIG. 8, it follows that light sources are focused at different sections of the transport path and therefore illuminate different portions of the bank note.

Accordingly, Applicants submit that Naruse does not disclose or suggest the apparatus of claim 1, particularly sensor and illumination units focused at a single predetermined section of the transport path. Withdrawal of the rejection is respectfully requested.

4. Rejection of claims 2, 6 and 9 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,723,072 (Naruse) in view of U.S. Patent 6,101,266 (Laskowski et al.)

Claims 2, 6 and 9 stand rejected as being unpatentable over Naruse in view of Laskowski et al. Claims 2, 6 and 9 have been rewritten as new claims 11, 14 and 18, respectively. Applicants respectfully traverse this rejection. For the reasons discussed below, Applicants submit that Naruse and Laskowski et al., whether considered collectively or individually, do not disclose or suggest the basic claimed apparatus recited in claim 10 nor the method of claim 14. Claim 11, which depends directly from claim 10, is also patentable based on its dependency from claim 10 and claim 18, which depends from claim 10, is also patentable based on its dependency from claim 14.

a. Invention Distinguished

Claim 10 is discussed above in relation to Naruse.

Claim 14 generally recites a method for determining the fitness of a bank note by sensing the bank note transported along a transport path by a transport device. The method includes the steps of:

simultaneously illuminating each side of the bank note at a single predetermined section of the transport path with light of the same wavelength or wave ranges of an identical intensity; and

evaluating light diffusely reflected from the bank note at the predetermined section of the transport path to determine the fitness thereof.

b. Reference Distinguished

As noted above, Naruse fails to disclose or suggest sensor and illumination units focused at a single predetermined section of the transport path. In the Office Action, the Examiner indicates that Naruse teaches an apparatus that illuminates both sides simultaneously at the same place, the same place being the bank note. Applicants disagree with this assertion on the basis that the sensor and illumination units in Naruse are directed towards the transport path along which the bank notes travel. Furthermore,

as discussed above, the sensors and illumination units in Naruse are directed at different sections of the transport path. It follows, therefore, that Naruse cannot teach a method step for simultaneously illuminating each side of the bank note at a single predetermined section of the transport path with light of the same wavelength or wave ranges of an identical intensity.

Laskowski et al. does not make up for the shortcomings of Naruse. Namely, Laskowski et al. fails to disclose or suggest an apparatus or method in which each side of the bank note is simultaneously illuminated at a single predetermined section of the transport path with light of the same wavelength or wave ranges of an identical intensity.

Accordingly, Naruse and Laskowski et al., whether considered collectively or independently, do not disclose or suggest the basic claimed apparatus of claim 10 nor the method of claim 14. Claims 12 and 18 are therefore patentable in view of their dependency from claims 10 and 14 respectively. Withdrawal of the rejection is respectfully requested.

5. Rejection of claims 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,723,072 (Naruse) in view of U.S. Patent 6,101,266 (Laskowski et al.) and further in view of U.S. Patent 6,040,584 (Liu et al.)

Claims 7 and 8 stand rejected as being unpatentable over Naruse in view of Laskowski et al. and further in view of Liu et al. New claims 16 and 17 correspond to original claims 7 and 8. New claims 16 and 17 depend indirectly from method claim 14. Applicants respectfully traverse this rejection.

In view of the discussion above in relation to the combination of Naruse and Laskowski et al., Applicants submit that Liu et al. fails to make up for the shortcomings of Naruse and Laskowski et al. Specifically, Liu et al. fails to disclose or suggest a method step of simultaneously illuminating each side of the bank note at a single predetermined section of the transport path with light of the same wavelength or wave ranges of an identical intensity.

Accordingly, Naruse, Laskowski et al. and Liu et al., whether considered collectively or independently, fail to disclose or suggest the basic claimed method of claim 14 and therefore claims 16 and 17 depending from claim 14. Withdrawal of the rejection is respectfully requested.

6. Rejection of claim 4 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,723,072 (Naruse) in view of U.S. Patent 6,241,069 (Mazur et al.)

Claim 4 stands rejected as being unpatentable over Naruse in view of Mazur et al. Claim 4 has been rewritten as new claim 13 which depends indirectly from claim 10. Applicants respectfully traverse this rejection.

In view of the discussion above in relation to Naruse, Applicants submit that Mazur et al. fails to make up for the shortcomings of Naruse. Particularly, Mazur et al. fails to disclose an apparatus wherein the sensor and illumination units are focused at a single predetermined section of the transport path.

Accordingly, Applicants submit that Naruse and Mazur et al., whether considered collectively or independently, fail to disclose or suggest the basic claimed apparatus of claim 10. It follows that claim 13, which depends from claim 10, is at least patentable based on its dependency from claim 10. Withdrawal of the rejection is respectfully requested.

7. Rejection of claim 5 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,723,072 (Naruse) in view of U.S. Patent 4,587,434 (Roes et al.)

The subject matter of claim 5 is not included in the new claims. Accordingly, this rejection is now moot.

8. Conclusion

In view of new claims 10-18, and further in view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that claims 10-18 be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicants' Attorney, the Examiner is invited to contact the undersigned at the numbers shown below.

BACON & THOMAS, PLLC
625 Slaters Lane, Fourth Floor
Alexandria, Virginia 22314-1176
Phone: (703) 683-0500

Date: October 17, 2002

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Respectfully submitted,

A handwritten signature in black ink, appearing to read "Justin J. Cassell", written in a cursive style.

JUSTIN J. CASSELL
Attorney for Applicants
Registration No. 46,205